## **Amendments to the Specification:**

On page 1, at line 1, insert the following paragraph:

This application claims benefit of priority to French Patent Application No. FR 0215908 filed December 16, 2002.

On page 1, at line 1, insert:

TECHNICAL FIELD

On page 1, at line 6, insert:

**BACKGROUND** 

On page 3, at line 5, insert:

SUMMARY

On page 5, please replace the paragraphs at line 12 with the following amended paragraph:

## BRIEF DESCRIPTION OF THE DRAWING

<u>FIG.</u> Figure 1 represents a conventional device for processing a signal derived from a particle detector;

On page 5, please replace the paragraphs at line 19 with the following amended paragraph:

<u>FIG.</u> Figure 2 represents one embodiment of a device of the invention for processing a signal derived from a particle detector;

On page 5, please replace the paragraphs at line 22 with the following amended paragraph:

FIG. Figure 3 represents one embodiment of the figure 2 device adapted to reduce the fluctuating component of the background noise; and

On page 5, please replace the paragraphs at line 25 with the following amended paragraph:

<u>FIG.</u> Figure 4 shows how the signal derived from the integrator varies as a function of time when using the device represented in figure 3.

On page 5, please replace the paragraph at line 28 with the following amended paragraph:

## DETAILED DESCRIPTION

<u>FIG.</u>– figure 1 represents a conventional device for processing a signal derived from a particle detector 1 which may use a CdZnTe material, be supplied with power by a high-tension supply HT and be used to measure X-rays, for example.

On page 6, please replace the paragraph at line 7 with the following amended paragraph:

<u>FIG.</u>—figure 2 represents a device 100 for processing a signal derived from a particle detector 1 constituting one embodiment of the invention. The detector 1 is similar to that from figure 1. This device 100 comprises an integrator 2 and a logic unit 3 which are also similar to the corresponding units from <u>figure FIG.</u> 1.

On page 6, please replace the paragraph at line 31 with the following amended paragraph:

<u>FIG.</u> – figure 3 represents one embodiment of the unit 5 from figure <u>FIG.</u> 2.

On page 7, please replace the paragraph at line 33with the following amended paragraph:

FIG. – figure 4 shows the behavior of the signals e and  $\underline{s}$  as a function of time t.